

# AMR™

## 64 MIXER

# Operating Instructions



- 6 inputs with 4 channel and stereo outputs
- Separate monitor mixer section to use for overdubbing, leaving all 6 inputs free for recording or mixing
- Monitor mixer section can also double as 4 additional "line" inputs, giving the AMR 64 up to 10 line inputs
- Input channel patching to insert a limiter, equalizer or other effects device on a given input
- Sweepable equalization on each input

# Getting Started

Enclosed in the shipping carton, you should find the following:

- 1 AMR™ 64 Mixer
- 1 wall mount power supply with cord and connector
- 1 Operating Instructions brochure

## Connecting Power to the AMR 64

Connect the wall mount power supply to a nearby AC power outlet. It is wise to see that audio signal lines are not near the power transformer (to prevent hum pickup). Power then can be applied to the mixer by turning on the front panel power switch.

## Connecting Signal Lines to the AMR 64

There are various system setups in which the AMR 64 mixer may be used, all of which cannot be covered in this operating instruction sheet. For a guideline, you will find a line drawing below that indicates where various pieces of equipment are connected to the AMR 64 mixer.

NOTE: All equipment that is connected to the AMR 64 mixer in the below line drawing is "line level," with exception to the microphone signals. Be careful when connecting your mixer to other equipment that you do not connect it to any microphone inputs on such equipment (use line level inputs and outputs only).

## Rack Mounting the AMR 64

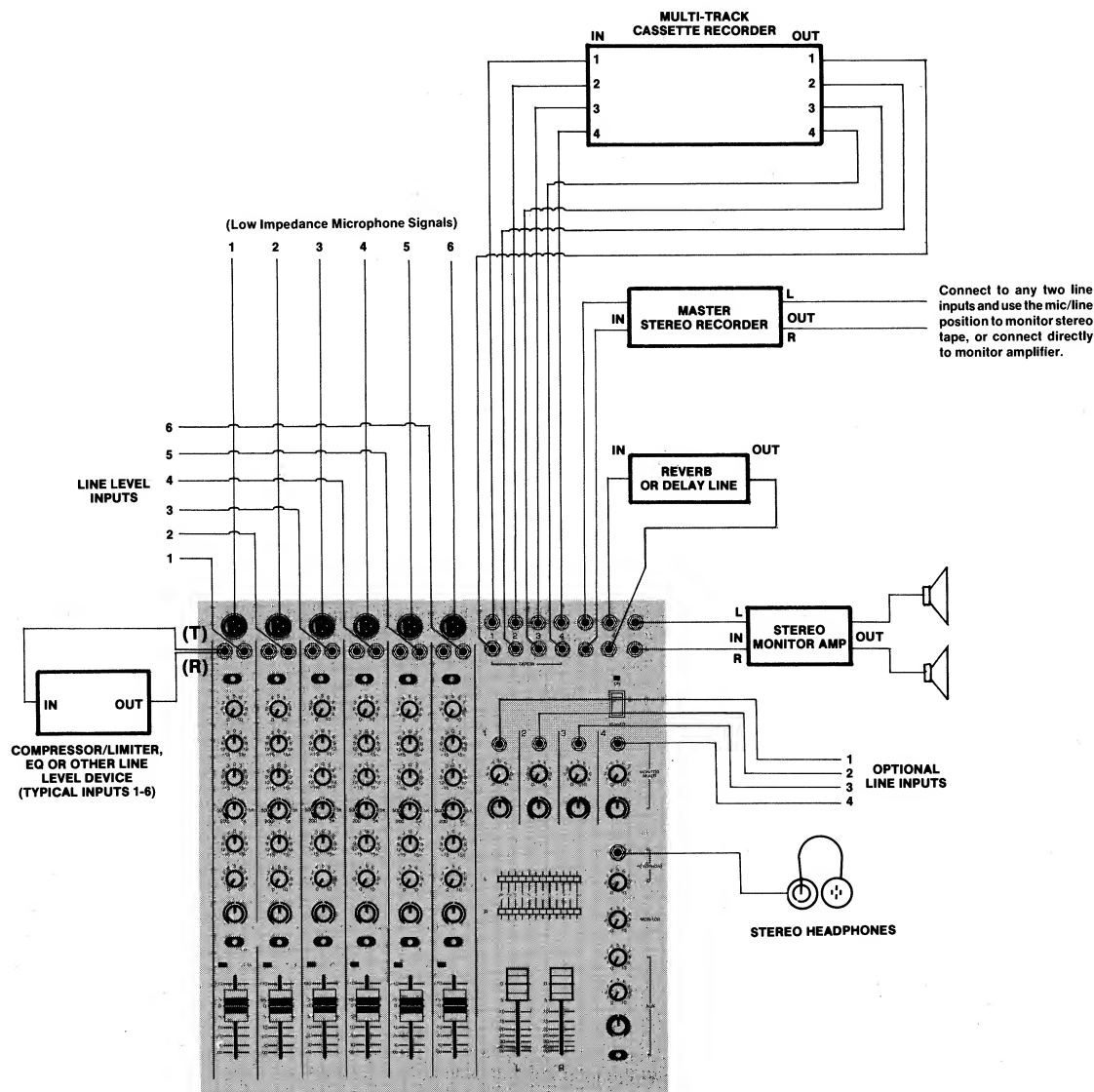
The AMR 64 may be rack-mounted, if desired, with the accessory rack mount kit. See your AMR dealer and ask for a RM™ 64 rack mount kit.

The AMR 64 is a compact mixer that features six inputs with four channel and simultaneous stereo outputs. The features and functions have been optimized for speed and flexibility in making high-quality multi-track recordings. The AMR 64 incorporates many features found on large mixing consoles such as input channel patching, separate monitor mixer, sweepable equalization, etc. As you become familiar with the operation of the AMR 64, you will grow to appreciate the attention to detail that makes this an exceptional mixer.

Each input channel features low impedance XLR microphone inputs, line level channel "insert" patching (mic preamp output and line input), mic/mute/tape switch, input gain control, three-band equalization (fixed high and low frequencies and a sweepable midrange), auxiliary send, linear level control, pan pot and output assignment switch, in addition to a peak reading LED to indicate an overload condition on that specific input.

The AMR 64 features a separate (4 x 2) monitor mixer that will allow you to have all input channels free during the overdubbing process. Typically, pre-recorded tape tracks are brought back through the normal input channels for monitoring purposes during overdubbing. In addition, the monitor mixer can be used as four additional line inputs during the mixdown process (providing a total of ten line inputs).

There are many more features that are incorporated on the AMR 64. As you read the detailed explanation of each feature, you will soon grow to appreciate its well thought out features and design.



**Insert:** This jack supplies an insert point (between the microphone preamp output and line input) on the front panel for the purpose of doing "insert" patching on any input channel. By this method, a microphone level signal is brought up to line level so it can be routed to the input of a line level piece of auxiliary equipment. The output of the auxiliary equipment is then routed back into the line input of the Insert Jack. The insert jack is a three-circuit (tip/ring/sleeve) type with the sleeve acting as ground, the microphone preamp output signal on the tip and the line level input on the ring. A special "insert" patch cable is required for this purpose, such as the AMR CAL™ 32/YP cable.

#### A Word About Insert Patching

Insert patching is a process of inserting a piece of auxiliary line level equipment into the signal path of a given input channel. Signals from such equipment are best inserted early on in the input channel prior to the level controls, equalization, auxiliary sends, etc. This insertion point must come after the microphone preamplifier (which brings the microphone level up to a line level signal).

The Insert Jack provides the input signal to the piece of auxiliary equipment (from the mixer mic preamplifier output), in addition to a return or input back to the input channel (from the output of the auxiliary equipment). This Insert Jack is normalled (connected) together internally, until something is inserted into the jack (which breaks the normal). A special cord must be used for insert patching (AMR CAL™ 32/YP).

**Gain:** Adjusts input gain to suit the various input signal levels (either microphone or line level signals). Clockwise rotation increases sensitivity for weaker signals such as microphone level signals. Counter-clockwise rotation decreases the input sensitivity for stronger line level signals such as tape recorder outputs, electronic keyboards, etc.

**Auxiliary Send:** A send level control for the use of external reverberation, echo, delay or other signal processing. This sends the signal after the equalizer (post EQ), thereby allowing the signals sent to any signal processing gear to be equalized along with the main signal. The Auxiliary Send Control is also prior to the Input Fader (pre fader), which will not allow the auxiliary signal level to be changed by the level settings of the Input Fader.

**Pan Pot:** This control adjusts the signal level between channels. Rotated full counter-clockwise will route full signal level to one channel; rotated full clockwise, full signal level will be routed to another channel. In the center position the signal will be divided equally between the two channels. Varying degrees in between are available by rotating the Pan Pot in either direction (either left or right of the center position). The actual signal routing is done by a combination of the Pan Pot and the Output Assignment Switch.

**Input Level (Channel Fader):** Once the Input Channel sensitivity has been adjusted with the Gain Control, the Input Channel Fader is used to make level adjustments of microphone, line or tape input signals.

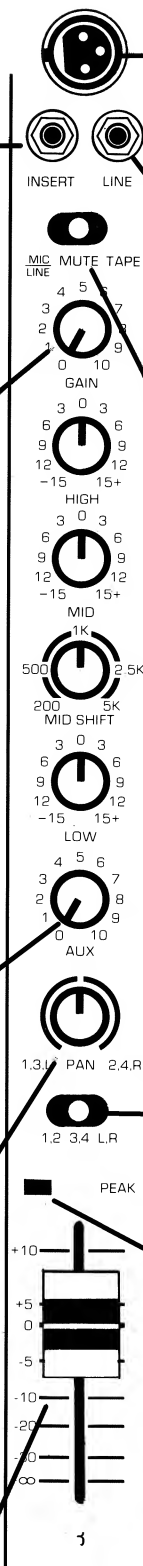
**Microphone Input:** This input is a balanced, XLR-type input for connection of low impedance (low Z) signals from microphones. This microphone input has the ability to accommodate a wide range of input signal levels with the use of the Input Gain Control.

**Line In:** This input will accommodate any line level signal, such as the output of an individual tape track or an output signal from a piece of auxiliary equipment (compressor/limiter, delay line, reverb, etc.).

**Mic/Line-Mute-Tape Switch:** Selects the input signal for a given input channel (in either the mic/line or tape position on Inputs 1-4). Keep in mind that Inputs 1-4 are dedicated to Tape Recorder Outputs 1-4 (which appear at the AMR 64's tape inputs). Inputs 5 and 6 have this switch labeled Mic-Mute-Line to indicate that there are no tape output signals normalled into those inputs. When this switch is in the Mute position, that input channel is disconnected from any input. This is handy when doing mixdowns and there are only parts of a track that you desire to use: just turn the Input Channel on by placing it in the Mic/Line or Tape position; when you want it off, place in the Mute position.

**Output Assignment Switch:** Routes the output of the Pan Pot to one of three channel pairs (1-2, 3-4 or L-R). Positions 1-2 or 3-4 will route the signal to the corresponding tape track of the multi-track recorder, while the L-R position will route signals to the L and R stereo bus (typically used in mixdown for making a stereo master tape).

**Peak LED Indicator:** This LED indicates an overload condition of a given input. It will flash when the input levels are excessive (+10 dBV). The signal level is measured post EQ and post Input Gain Control. It is all right for this indicator to flash on occasion; however, excessive flashing of this indicator warns of an overload condition that will cause audible distortion. There is a 4 dB difference between the level that will cause the Peak Indicator to glow and the level that will cause audible distortion. Thereby, the Peak Indicator is a warning that you are very close to an overload condition (which will cause audible distortion). The Peak LED Indicator can also be a guide in adjusting the input signal levels via the Input Gain Control.





**Mid Frequency EQ:** Is a quasi-parametric type (often referred to as "sweepable") of equalization. Unlike "fixed" frequency EQ, this allows the operator to adjust (tuning like a radio) to the specific frequency range or desired sound. This is a very flexible type of equalization that is preferred by many mixing engineers. The operation incorporates two controls: **Mid Shift:** Used to adjust (or select) the center of the frequency range (adjustable from 200 Hz to 5 kHz). **Boost/Cut:** Used to select the amount of boost or cut for the mid frequency section of the equalizer.

#### About Sweepable Equalizers

The Mid Frequency EQ section of the AMR 64 utilizes a sweepable type equalization circuit. Such equalizers provide a continuous adjustment of frequencies within the equalizer's operating range (unlike normal fixed-frequency equalizers that offer one or a handful of preset fixed frequencies). The sweepable type on the AMR 64 will allow the range to be adjusted anywhere between 200 Hz and 5 kHz. You first determine if you wish to boost or cut, then simply apply a moderate amount of boost or cut (+5 or -5 dB) and adjust the frequency control to the desired frequency range. This moderate amount of boost or cut will allow you to hear the affected frequency range quite easily, thereby allowing you to place the equalizer within the desired frequency range. Once you have identified the desired frequency range (by this method), then readjust the Boost/Cut Control (up or down) to the desired amount. A set of graphs are shown to indicate the operational characteristics of the sweepable midrange section of the AMR 64 equalizer.

Fig. #1 Characteristic EQ Curve of the Sweepable Midrange

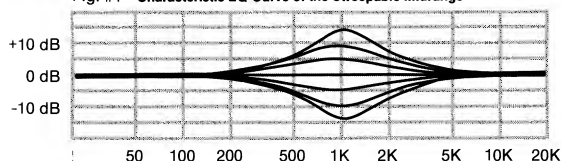
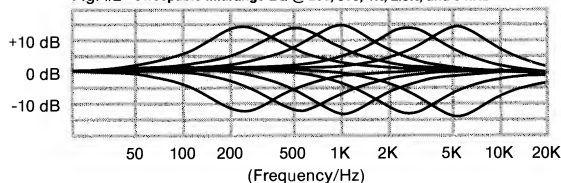


Fig. #2 Sweepable Midrange EQ @ 250, 500, 1K, 2.5K, and 5 kHz



**High Frequency EQ:** This is a shelving-type equalizer for boosting or cutting high frequencies up to 15 dB.

**Low Frequency EQ:** This is a shelving-type equalizer for boosting or cutting low frequencies up to 15 dB.

#### About Shelving Equalizers

The High and Low Frequency Equalization of the AMR 64 utilize a shelving-type equalizer circuit. While referring to the EQ graphs, you will see that slight amounts of boost or cut affect only the extreme high or low frequency ranges. If you will refer to Figure #3, you will notice that a 5 dB boost at 50 Hz has little effect at 200 Hz, while a 15 dB boost at 50 Hz will boost 200 Hz by approximately 6 dB. The same is true with the high frequency equalizer in Figure #4 - a 5 dB boost at 10 kHz will boost 1 kHz approximately 3 dB, while a 15 dB boost at 10 kHz will boost 1 kHz approximately 6 dB.

With larger amounts of boost or cut, low frequency shelving equalizers will affect the frequency ranges above as well as below the indicated frequency of 50 Hz. Likewise, with larger amounts of boost or cut, high frequency shelving equalizers will affect the frequency ranges above and below 10 kHz.

Fig. #3

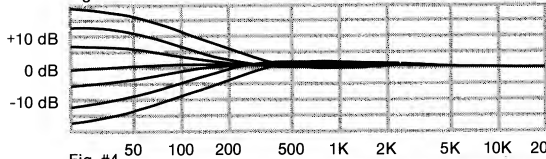
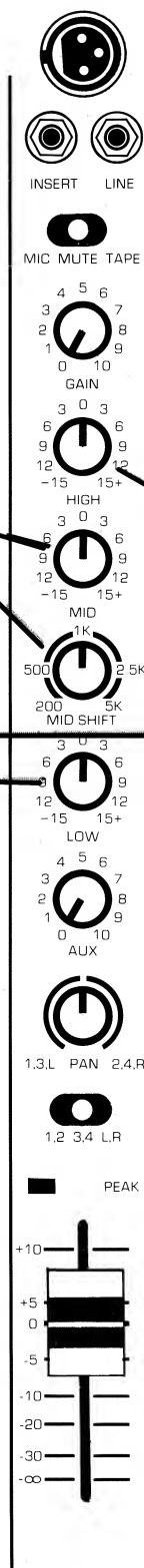
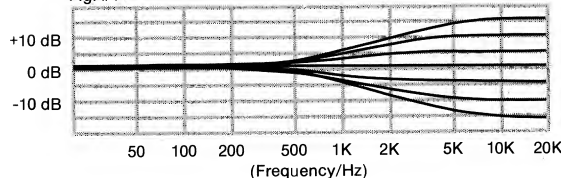


Fig. #4



**Tape Inputs and Outputs:** There are four jacks marked Tape Out which supply the output signal from the mixer to be routed to the corresponding inputs of the multi-track recorder. Likewise, the four jacks labeled "Tape In" are inputs to the mixing console (which appear on Input Channels 1-4, respectively) from the outputs of the multi-track recorder.

**Stereo Outputs (L & R):** These two jacks (marked L Out and R Out) provide output signal for the input of a stereo cassette recorder or a two-track reel-to-reel recorder for the purpose of making your final "stereo" master tape.

**Auxiliary Out:** This is the main output of the Auxiliary Send Section of the mixer. Its level and signal content is determined by the settings of the Auxiliary Send Controls on each input and the Auxiliary Master Level Control. This jack provides a signal to be routed to the input of effects devices such as reverb, echo, delay, etc.

**Auxiliary In:** The outputs of effects devices such as reverb, echo, etc. are connected to the Auxiliary Return (which allows the output signals of such devices to be mixed in or added to the main signal). Signals returned through the Auxiliary In can be routed to any of the Tape Tracks (1-4) or the Stereo (L & R) bus via the Auxiliary Pan Control and the Auxiliary Output Assignment Switch. The return signal level of the effects devices is controlled by the Auxiliary Master Return Control.

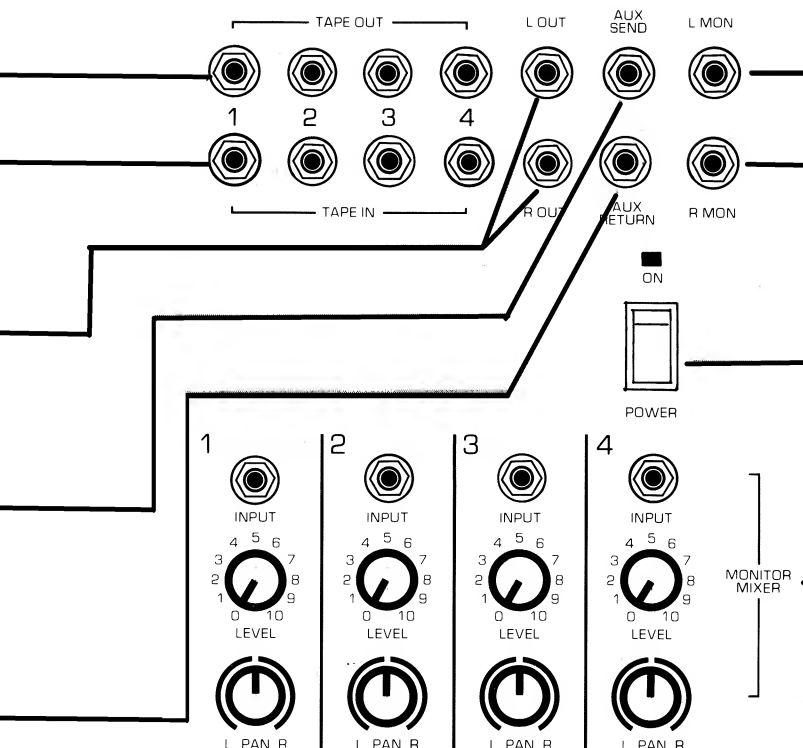
**Output Level Indicators:** There are two arrays of LED indicators that will provide a visual indication of the AMR 64's L & R Master Outputs. The twelve-sectioned tricolored arrays are peak level responding, and will indicate signal level fluctuations many times faster than standard VU meters that will not respond quickly enough to indicate the peak content of a signal.

**Headphone Output:** This output has a "stereo" (tip/ring/sleeve) type jack that will feed any standard stereo headphones. This output can be used for monitoring while overdubbing or to monitor the output of the mixer (if no monitor loudspeakers are being used). This output has its own power section and will provide 0.5 watts into a pair of 8 ohm headphones.

**Headphone Level:** This control is used to adjust signal levels of the Headphone Output Jack.

**Monitor Level Control:** This controls the monitor signal level which appears at the Monitor Output Jacks.

**Auxiliary Master Send Control:** This is a Master Level Control for the Auxiliary Send Section of the mixer. The mix is determined by the settings of the six Auxiliary Send Controls on each input channel. The Master Level Control will allow the overall level to be increased or decreased without changing the mix of the individual Auxiliary Send Controls on the inputs.



**Monitor Outputs (L & R):** These two outputs contain the same signal information as the Stereo L & R outputs. This provides the means of sending the same output signal to a monitor amplifier and speakers for monitoring purposes. The level of the monitor signal is controlled separately by its own Monitor Level Control. The monitor output levels have been optimized for driving conventional power amplifiers.

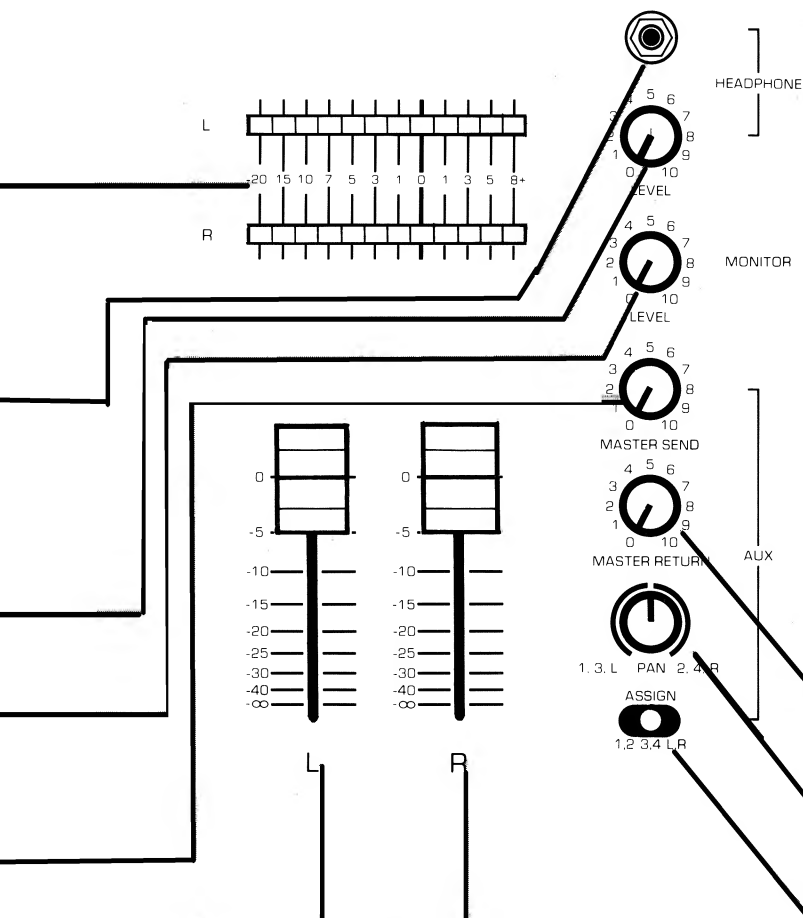
**Power Switch and Power On Indicator:** This rocker-type switch is used to apply power to the AMR 64. The LED Power Indicator will indicate when the mixer is "on" and power is applied.

**Monitor Mixer:** This is an independent 4 in by 2 out mixer that is used primarily for monitoring during the overdubbing process. A Level Control and Pan Control are provided on each of the four Inputs on the Monitor Mixer. This "Monitor Mixer" will allow you to monitor any or all four Tape Tracks, thereby keeping all six Inputs free for incoming microphone or line level signals.

The output signals from the multi-track recorder (1-4, respectively) will appear on Inputs #1 through #4 of the Monitor Mixer. Tape Tracks that are already recorded will appear at the Monitor Mixer when the recorder is in the Play Mode. Tape tracks that you are currently recording can be monitored through the monitor mixer as the recorder will be in the Record Position (i.e., Record Switch activated). The normal process of recording will allow you to monitor any track previously recorded or currently being recorded through the Monitor Mixer Section of the AMR 64. The output of this mixer is internally connected to the L & R Stereo Bus (L & R or Stereo Output). The monitor level is controlled by the Monitor Level Control, which obtains its signal from the L & R Stereo Bus).

The Monitor Mixer can also be used to mix other signals to the Stereo Bus by connecting external line level signals into the Input Jacks. When a plug is inserted into the Input Jack, the recorder output is lifted and the signal from the Input Plug is accepted. When the plug is removed, the multi-track recorder output again appears at the Monitor Mixer Input.

It should also be mentioned that if you desire to add equalization or effects while monitoring (for overdubbing purposes), the previously recorded Tape Tracks can be fed back into Input Channels 1-4 for this purpose by switching the appropriate Input Source Switch to Tape.



**Master Level Controls (L & R):** These two faders control the signal level that appears at the L & R "stereo" outputs.

**Auxiliary Master Return Control:** This controls the return signal level of any effects device that is connected to the Auxiliary Return.

**Auxiliary Pan Control:** This will adjust the balance of the Auxiliary Return signal across any pair of channels selected by the Assign Switch.

**Auxiliary Output Assignment Switch:** This routes the output of the Pan Pot to one of three channel pairs (1-2, 3-4 or L-R). Positions 1-2 or 3-4 will route the signal to the corresponding Tape Track of the multi-track recorder, while the L-R position will route signals to the L & R "stereo" bus.

# SPECIFICATIONS

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<b>Frequency Response</b>	+/- 2 dB 20 Hz - 20 kHz (all EQ flat position)
<b>Equivalent Input Noise</b>	-130 dBV at 40 dB Gain -127 dBV at 30 dB Gain (Mic Input to Channel Output; EQ flat; Slider maximum)
<b>Distortion</b>	Less than .003% THD at 0 dB output
<b>Input Channels</b>	
Input Impedance	Mic - 50K ohms Line - 15K ohms Tape - 10K ohms Insert On - 22K ohms
Output Impedance (Channel Out)	100 ohms
Output Impedance (Insert Out)	100 ohms (tip)
Microphone Input Attenuator (Pad)	20 dB (fixed)
Gain	3 dB to 60 dB (adjustable)
Maximum Input Level (Mic)	+11 dBV (LED clip level indicator) +15 dBV (maximum level before clipping)
Maximum Input Level (Line)	+21 dBV (LED clip level indicator) +25 dBV (maximum level before clipping)
Maximum Channel Output Level	+14 dBV (LED clip level indicator) +18 dBV (maximum level before clipping)
Maximum Insert Output Level	+18 dBV
Equalizer	
High Frequency	+/- 15 dB at 10 kHz (shelving-type)
Low Frequency	+/- 15 dB at 50 Hz (shelving-type)
Mid Frequency	+/- 15 dB at selected frequency (adjustable from 200 Hz to 5 kHz)
<b>Output Section</b>	
Impedance	100 ohms (L&R)
Maximum Output Level	+18 dBV (L&R)
Nominal Headroom	+18 dBV (reference: 0 dBV)
Noise	
Bus	-96 dBV (all channel sliders down; auxiliary return down)
Nominal	-91 dBV (all channels at 30 dB Gain; EQ flat, sliders up; auxiliary return down)
Output Level Indicators	0 dB = -10 dBV (factory calibrated) 0 dB is indicated by the LED display having the 0 dB LED illuminated (internally adjustable from -17 dBV to +9.5 dBV)
<b>Auxiliary Send and Returns</b>	
Send Output Impedance	1K ohms
Send Maximum Output Level	+18 dBV
Return Input Impedance	10K ohms
Return Maximum Input Level	+30 dBV
Return Gain	14 dB (maximum)
<b>Monitor Mixer Section</b>	
Input Impedance	10K ohms
Maximum Input Level	+30 dBV
Gain	14 dB (maximum)
<b>Monitor Output Section</b>	
Output Impedance	100 ohms
Nominal Operating Level	-10 dBV
Maximum Output Level	+18 dBV
<b>Headphone Section</b>	
Output Impedance	8 ohms to 300 ohms
Output Power	0.5 watts into 8 ohms
Output Connector	¼" phone (ring/tip/sleeve)
<b>Power Requirements</b>	120 VAC at 50/60 Hz at 25 watts 220 and 240 VAC at 50/60 Hz available upon request Meets UL and CSA electrical codes
<b>Dimensions:</b>	17" W x 17.5" H x 2.5" D (431 mm x 444 mm x 63 mm)
<b>Weight:</b>	16 lbs. (7.2 kg)

THIS LIMITED WARRANTY VALID ONLY WHEN PURCHASED AND REGISTERED IN THE UNITED STATES OR CANADA. ALL EXPORTED PRODUCTS ARE SUBJECT TO WARRANTY AND SERVICES TO BE SPECIFIED AND PROVIDED BY THE AUTHORIZED DISTRIBUTOR FOR EACH COUNTRY.

Diese Garantie ist nur in den USA und Kanada gültig. Alle Export-Produkte sind der Garantie und dem Service des Importeurs des jeweiligen Landes unterworfen.

Ces clauses de garantie ne sont valables qu'aux Etats-Unis et au Canada. Dans tous les autres pays, les clauses de garantie et de maintenance sont fixées par le distributeur national et assurées par lui selon la législation en vigueur. Esta garantía es válida solamente cuando el producto es comprado en E.U. continentales o en Canada. Todos los productos que sean comprados en el extranjero, están sujetos a las garantías y servicio que cada distribuidor autorizado determine y ofrezca en los diferentes países.

## ONE-YEAR LIMITED WARRANTY

AMR (Audio Media Research) warrants this product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions and limitations hereinafter set forth:

### AMR 90-DAY LIMITED WARRANTY ON TUBES AND METERS

If this product contains tubes or meters, AMR warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions and limitations hereinafter set forth.

### CONDITIONS, EXCLUSIONS AND LIMITATIONS OF LIMITED WARRANTIES

These limited warranties shall be void and of no effect if:

- The first purchase of the product is for the purpose of resale; or
- The original retail purchase is not made from an AUTHORIZED AMR DEALER; or
- The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
- The serial number affixed to the product is altered, defaced or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, AMR will:

- In the case of tubes or meters, replace the defective component without charge; or
- In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at AMR's option; and provided, however, that in any case all costs of shipping (if necessary) are paid by you, the Purchaser.

THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED, MAILED TO AND RECEIVED BY AMR WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.

In order to obtain service under these warranties, you must:

- Bring the defective item to any AUTHORIZED AMR DEALER or AUTHORIZED AMR SERVICE CENTER and present therewith the PERSONAL WARRANTY IDENTIFICATION CARD along with the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED AMR DEALER in connection with your purchase from him of this product.

If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service, you will be directed to the nearest other AUTHORIZED AMR DEALER or AUTHORIZED AMR SERVICE CENTER which can provide such service.

OR

- Ship the defective item, prepaid, to:

AMR NATIONAL SERVICE CENTER  
HIGHWAY 503  
DECATUR, MS 39327

including therewith a complete, detailed description of the problem, together with your PERSONAL WARRANTY IDENTIFICATION CARD along with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon AMR's receipt of these items:

- If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, AMR will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the Purchaser.

AMR's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of \$500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal

property allegedly caused by AMR's negligence. AMR does not assume liability for personal injury or property damage arising out of or caused by a non-AMR alteration or attachment, nor does AMR assume any responsibility for damage to interconnected non-AMR equipment that may result from the normal functioning and maintenance of the AMR equipment.

UNDER NO CIRCUMSTANCES WILL AMR BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, INCIDENTAL DAMAGES OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF AMR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESS LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESS WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON AMR.

In the event of any modification or disclaimer of express or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and AMR gives this limited warranty only with respect to equipment purchased in the United States of America and Canada.

### INSTRUCTIONS — WARRANTY REGISTRATION CARD

- Mail the completed WARRANTY REGISTRATION CARD to:

AUDIO MEDIA RESEARCH  
HIGHWAY 503  
DECATUR, MS 39327

- Keep the PERSONAL WARRANTY ID CARD along with your PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need these documents. **There will be no other identification card issued by AMR.**

- Defaced, mutilated or altered cards will not be honored.

- IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESS:

- Completion and mailing of WARRANTY REGISTRATION CARDS - Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help insure that you are contacted and properly notified.

- Notice of address changes - If you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify AMR of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.

- Any correspondence with the factory concerning this product should include the serial number of the item(s).

## RETAIN YOUR PROOF OF PURCHASE

### ANGER

Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time.

The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To insure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

### CAUTION

This mixer has been designed and constructed to provide adequate power reserve for recording or reproducing modern music which may require occasional peak power. To handle occasional peak power, adequate power "headroom" has been designed into this system. Extended operation at absolute maximum amplifier power levels is not recommended since this could damage the associated loudspeaker system. Please be aware that maximum power can be obtained with very low settings of the gain controls if the input signal is very strong.

- Read all safety and operating instructions before using this product.
- All safety and operating instructions should be retained for future reference.
- Obey all cautions in the operating instructions and on the back of the unit.
- All operating instructions should be followed.
- This product should not be used near water; i.e., a bathtub, sink, swimming pool, wet basement, etc.
- This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
- This product should not be placed near a source of heat such as a stove, heater, radiator or another heat-producing amplifier.
- Connect only to a power source of the type marked on the unit adjacent to the power supply cord.
- Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet, "Shock Hazard and Grounding."
- Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
- The power supply cord should be unplugged when the unit is to be unused for long periods of time.
- Metal parts can be cleaned with a damp rag. The vinyl covering parts on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary.
- Care should be taken so that objects do not fall and liquids are not applied into the unit through the ventilation holes or any other openings.
- This unit should be checked by a qualified service technician if:
  - The power supply cord or plug has been damaged;
  - Anything has fallen or been spilled into the unit;
  - The unit does not operate correctly; or
  - The unit has been dropped or the enclosure damaged.
- The user should not attempt to service this equipment. All service work should be done by a qualified service technician.



AUDIO MEDIA RESEARCH ROUTE 2 HWY 503 DECATUR, MS 39327

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